

What is claimed is:

1. A data transfer control device for transferring data among a plurality of nodes that are connected to a bus, the data transfer control device comprising:

means for starting transfer processing when processing means issues a start command for data transfer, and for resuming transfer processing when the processing means issues a resume command for data transfer;

cancellation means for canceling an execution of the start command or the resume command, when the processing means issues the start command or the resume command during a period of a reset that clears node topology information; and

means for informing the processing means that command execution has been canceled by the reset.

2. The data transfer control device as defined in claim 1, further comprising:

means for issuing an interrupt with respect to the processing means when an execution of the start command or the resume command for data transfer is canceled by the occurrence of the reset; and

factor storage means for informing the processing means of a factor of the interrupt.

3. The data transfer control device as defined in claim

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wherein the cancellation means cancels the start command or the resume command by using a signal that goes active during the reset period to mask a signal that goes active when the processing means issues the start command or the resume command.

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4. The data transfer control device as defined in claim 1, further comprising:

means for pausing transfer processing at a previously determined location when the processing means issues a data transfer pause command or when a transfer error occurs.

5. The data transfer control device as defined in claim 1, further comprising:

transfer execution means for executing processing for dividing transfer data into a series of packets then transferring the divided series of packets continuously, when the processing means issues the start command for data transfer.

6. The data transfer control device as defined in claim 1,

wherein the reset is a bus reset as defined by the IEEE 1394 standard.

7. A data transfer control device for transferring data among a plurality of nodes that are connected to a bus, the data transfer control device comprising:

transfer execution means for executing processing for

dividing transfer data into a series of packets then transferring the divided series of packets continuously, when processing means issues a start command for data transfer; and

pause means for pausing a transfer processing after a step
5 execution of the transfer processing, when the processing means issues a resume command and a pause command for data transfer together.

8. The data transfer control device as defined in claim

10 7,

wherein the pause means executes the step execution and the pause of the transfer processing, based on a resume signal that goes active when the resume command is issued, and a delay
15 pause signal that goes active after a delay of a given period after the resume signal goes active when the resume command and the pause command are issued together.

9. The data transfer control device as defined in claim

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20 wherein data transfer is performed in accordance with the IEEE 1394 standard.

10. The data transfer control device as defined in claim

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25 wherein data transfer is performed in accordance with the IEEE 1394 standard.

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11. Electronic equipment comprising:

the data transfer control device as defined in claim 1;

a device for performing given processing on data that has
been received from another node via the data transfer control
5 device and the bus; and

a device for outputting or storing data that has been
subjected to the processing.

12. Electronic equipment comprising:

10 the data transfer control device as defined in claim 6;

a device for performing given processing on data that has
been received from another node via the data transfer control
device and the bus; and

a device for outputting or storing data that has been
15 subjected to the processing.

13. Electronic equipment comprising:

the data transfer control device as defined in claim 7;

a device for performing given processing on data that has
20 been received from another node via the data transfer control
device and the bus; and

a device for outputting or storing data that has been
subjected to the processing.

25 14. Electronic equipment comprising:

the data transfer control device as defined in claim 9;

a device for performing given processing on data that has

been received from another node via the data transfer control device and the bus; and

a device for outputting or storing data that has been subjected to the processing.

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15. Electronic equipment comprising:

the data transfer control device as defined in claim 10;

a device for performing given processing on data that has been received from another node via the data transfer control device and the bus; and

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a device for outputting or storing data that has been subjected to the processing.

16. Electronic equipment comprising:

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the data transfer control device as defined in claim 1;

a device for performing given processing on data that is to be transferred to another node via the data transfer control device and the bus; and

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a device for fetching data to be subjected to the processing.

17. Electronic equipment comprising:

the data transfer control device as defined in claim 6;

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a device for performing given processing on data that is to be transferred to another node via the data transfer control device and the bus; and

a device for fetching data to be subjected to the

processing.

18. Electronic equipment comprising:

the data transfer control device as defined in claim 7;

5 a device for performing given processing on data that is
to be transferred to another node via the data transfer control
device and the bus; and

a device for fetching data to be subjected to the
processing.

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19. Electronic equipment comprising:

the data transfer control device as defined in claim 9;

15 a device for performing given processing on data that is
to be transferred to another node via the data transfer control
device and the bus; and

a device for fetching data to be subjected to the
processing.

20. Electronic equipment comprising:

20 the data transfer control device as defined in claim 10;

a device for performing given processing on data that is
to be transferred to another node via the data transfer control
device and the bus; and

25 a device for fetching data to be subjected to the
processing.

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